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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,923	02/25/2004	Kang Soo Seo	1740-000086/US	4876
30593 7590 05/13/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER ADEGEYE, OLUWASEUN				
ART UNIT 2621		PAPER NUMBER		
MAIL DATE 05/13/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/786,923

**Applicant(s)**

SEO ET AL.

**Examiner**

OLUWASEUN A. ADEGEYE

**Art Unit**

2621

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02/25/2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 - 25 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 02/25/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/CDC)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 02/26/2009 with respect to claim 1 have been fully considered but they are not persuasive.

In re page 9, applicants disclose that Mori only discloses graphic data as the additional data. The claim discloses at least one of graphic data and subtitle data therefore even though Mori only discloses graphic data it still covers the limitation.

In re page 9, applicants also disclose that Mori does not disclose wherein the additional data is included in a plurality of sub-planes based on a type of the additional data. In response, the examiner respectfully disagrees. Paragraph 79 clearly discloses graphics (OSD menu) overlaid on the digital video signal.

In re page 10, the applicants disclose that Mori does not disclose sub-planes which are divided into distinct regions. The examiner relied on the Oh reference to teach this limitation. Oh discloses in paragraph 41 that each of the additional data can be stored in a separate region. Therefore combining Mori and Oh will arrive at a concept of additional data stored in distinct regions and the additional data configured to be overlaid in the video signal. The Oh reference was only brought in to teach that the additional data can be stored in distinct regions.

The limitation "at least one of a graphic data and subtitle data" gave the examiner the option of either one or the other. Since Mori discloses graphics (OSD menu) the examiner believes that to be a plurality of sub-planes.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 3 and 6 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al (US 2002/0095531 A1) in view of Oh et al (US 2003/0099464 A1).

As to **claim 1**, Mori in view of Haan discloses a method for recording graphic/subtitle data on a recording medium, comprising the steps of:

receiving video data (video signal) and additional data including graphic data and/or subtitle data (graphic signal) (see [79]); and

recording the additional data on the recording medium (DVD) by dividing and organizing the additional data in such a way that the additional data is included in a plurality of regions that will be overlaid on a video image constructed from the video data (see [79] and [80]).

wherein the additional data is included in a plurality of sub planes based on a type of the additional data, each of the sub-planes including at least one of the distinct regions (see [079] and [080])e paragraph discloses outputting a video signal and then overlaying a graphic signal on the video signal).

wherein each of the distinct regions of each of the sub-planes includes an object so that the additional data of each of the regions of each of the sub-planes are

configured to be overlaid in the video image (see [079] and [080])e paragraph discloses outputting a video signal and then overlaying a graphic signal on the video signal).

However Mori does not disclose recording the additional data on the recording medium by dividing and organizing the additional data in such a way that the additional data is included in a plurality of distinct regions that do not overlap with each other .

Oh discloses recording the additional data on the recording medium by dividing and organizing the additional data in such a way that the additional data is included in a plurality of distinct regions that do not overlap with each other (see [041]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the concept of additional data is divided and organized into the plurality of distinct regions taught by Haan to the method of Mori to provide an apparatus capable of displaying subtitles on a screen when the contents are played (see [003]).

As to **claim 6**, Mori discloses a method for recording graphic/subtitle data on a recording medium, comprising the steps of:

receiving video data (video signal) and additional data including at least one of graphic data and/or subtitle data (graphic signal) (see [79] and [80]) ; and

However Mori does not disclose recording the additional data as a plurality of individual parallel streams on the recording medium such that two types of additional data included in a same region are respectively recorded in two separate parallel streams and two types of additional data included in different regions in a same plane are recorded in a same stream in serial.

Oh discloses recording the additional data as a plurality of individual parallel streams on the recording medium such that two types of additional data included in a same region are respectively recorded in two separate parallel streams and two types of additional data included in different regions in a same plane are recorded in a same stream in serial (see [041]. The above paragraph discloses recording subtitles in separate regions of a storage medium).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the step of recording the additional data in separate regions of a storage medium as taught by Oh to the apparatus of Mori to provide an apparatus capable of displaying subtitles on a screen when the contents are played (see [003]).

As to **claim 9**, this is a computer readable claim corresponding to the method claim 1. Mori discloses a DVD (see [78]). Therefore, claim 9 is analyzed and rejected as previously discussed with respect to claim 1.

As to **claim 11**, this claim is similar to claim 9 only in that the limitation "and the computer readable medium having an information area storing information files for managing reproduction of the video data and the additional data" is additionally recited.

Oh discloses and the computer readable medium having an information area storing information files (time information) for managing reproduction of the video data and the additional data (see [049]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the step of recording the additional data in separate

regions of a storage medium as taught by Oh to the apparatus of Mori to provide an apparatus capable of displaying subtitles on a screen when the contents are played (see [003]).

As to **claim 13**, this claim is similar to claim 1 only in that the limitation "third means for recording the additional data and the video data on the recording medium" is additionally recited. Oh discloses third means for recording the additional data and the video data on the recording medium (see [010]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the step of recording the additional data and the video data taught by Oh to the apparatus of Mori to provide an apparatus capable of displaying subtitles on a screen when the contents are played (see [003]).

As to **claim 15**, grounds for rejecting claim 13 apply to claim 15 in its entirety.

As to **claim 18**, grounds for rejecting claim 1 apply to claim 18 in its entirety.

As to **claim 21**, grounds for rejecting claim 18 apply to claim 21 in its entirety.

As to **claim 2**, Mori in view of Oh discloses the method set forth in claim 1. Mori discloses wherein the graphic data and subtitle data are organized into distinct sub-planes (see [79] and [80]).

As to **claim 3**, Mori discloses the method set forth in claim 1, wherein the video data is included in a main plane (see [079] and [080]).

As to **claim 7**, Mori in view of Haan discloses the method set forth in claim 6. Mori discloses wherein the number of the plurality of streams is the same as the number of graphic decoders contained in a reproducing apparatus (see [79] – [80] and fig. 9).

As to **claim 8**, Mori in view of Haan discloses the method set forth in claim 6. Mori discloses wherein parts of the additional data that should be simultaneously decoded are placed in distinct streams (see [79] – [80] and fig. 9).

As to **claim 10**, Mori in view of Haan discloses the high-density recording medium set forth in claim 9. Mori discloses wherein the graphic data and subtitle data are organized into distinct regions (see [79] – [80] and fig. 9).

As to **claim 12**, grounds for rejecting claim 8 apply to claim 12 in its entirety.

As to **claim 14**, grounds for rejecting claim 8 apply to claim 14 in its entirety.

As to **claim 16**, grounds for rejecting claim 7 apply to claim 16 in its entirety.

As to **claim 17**, grounds for rejecting claim 8 apply to claim 17 in its entirety.

As to **claim 19**, Mori in view of Haan discloses the method set forth in claim 18. Mori discloses wherein the plurality of planes include a subtitle plane and a graphic plane (see [79] – [80]).

As to **claim 20**, Mori in view of Haan discloses the method set forth in claim 19. Mori discloses wherein the subtitle plane includes decoded graphic data as well as decoded subtitle data (see [79] – [80]).

As to **claim 22**, Mori in view of Haan discloses the apparatus set forth in claim 21. Mori discloses wherein the second means organizes the additional data into a subtitle plane and a graphic plane (see [79] – [80]).

As to **claim 23**, Mori in view of Haan discloses the apparatus set forth in claim 22. Mori discloses wherein the second means organizes the subtitle plane such that the



subtitle plane includes decoded graphic data as well as decoded subtitle data (see [79] – [80]).

As to **claim 24**, Mori in view of Haan discloses the method set forth in claim 1. Mori discloses wherein the graphic data and the subtitle data are decoded by different decoders (see [79] – 80] and fig. 9).

As to **claim 25**, grounds for rejecting claim 24 apply to claim 25 in its entirety.

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori in view of Oh as applied to claim 1 above and further in view of De Haan (US 2003/0117529 A1).

As to **claim 4**, Mori in view of Oh discloses the method set forth in claim 1. However they do not disclose wherein each of the plurality of regions includes at least one object.

Haan discloses wherein each of the plurality of regions includes at least one object (subtitle text) (see [11] and [27]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to added the step of wherein each of the plurality of regions includes at least one object taught by Haan to the apparatus of Mori in view of Haan so that the displaying the overlay information may be linked more with the basic information (see [007]).

As to **claim 5**, Mori in view Oh and Haan discloses the method set forth in claim 4. However Mori in view of Oh does not disclose wherein the object is text, an icon, an image, or a background box.

Haan discloses wherein each of the plurality of regions includes at least one object (subtitle text) (see [11] and [27]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to added the step of wherein each of the plurality of regions includes at least one object taught by Haan to the apparatus of Mori in view of Oh so that the displaying the overlay information may be linked more with the basic information (see [007]).

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUWASEUN A. ADEGEYE whose telephone number

is (571)270-1711. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

05/09/2009  
/Marsha D. Banks-Harold/  
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/O.A/

